

1632

Serial Number: 09/09,591

ENTERED

CRF Processing Date: 11/6/2000

Edited by: [Signature]  
Verified by: [Signature] (STIC Staff)

RECEIVED

DEC 04 2000

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

RAW SEQUENCE LISTING                      DATE: 11/13/2000  
 PATENT APPLICATION:    US/09/509,591        TIME: 10:31:59

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\11132000\I509591.raw

## SEQUENCE LISTING

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3 (1) GENERAL INFORMATION:
5   (i) APPLICANT: Little, Andrew
6             Lamparski, Henry
7             Schuur, Eric
8             Henderson, Daniel
10  (ii) TITLE OF INVENTION: ADENOVIRUS VECTORS SPECIFIC FOR CELLS
11                        EXPRESSING ALPHA-FETOPROTEIN AND METHODS OF USE THEREOF
13  (iii) NUMBER OF SEQUENCES: 23
15  (iv) CORRESPONDENCE ADDRESS:
16        (A) ADDRESSEE: MORRISON & FOERSTER
17        (B) STREET: 755 PAGE MILL ROAD
18        (C) CITY: PALO ALTO
19        (D) STATE: CA
20        (E) COUNTRY: USA
21        (F) ZIP: 94304-1018
23  (v) COMPUTER READABLE FORM:
24        (A) MEDIUM TYPE: Floppy disk
25        (B) COMPUTER: IBM PC compatible
26        (C) OPERATING SYSTEM: PC-DOS/MS-DOS
27        (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
29  (vi) CURRENT APPLICATION DATA:
C--> 30        (A) APPLICATION NUMBER: US/09/509,591
C--> 31        (B) FILING DATE: 02-Jun-2000
32        (C) CLASSIFICATION:
34  (vii) PRIOR APPLICATION DATA:
35        (A) APPLICATION NUMBER: PCT/US98/04084
36        (B) FILING DATE: 03-MAR-1998
38  (viii) ATTORNEY/AGENT INFORMATION:
39        (A) NAME: POLIZZI, CATHERINE M.
40        (B) REGISTRATION NUMBER: 40,130
41        (C) REFERENCE/DOCKET NUMBER: 348022000420
43  (ix) TELECOMMUNICATION INFORMATION:
44        (A) TELEPHONE: (650) 813-5600
45        (B) TELEFAX: (650) 494-0792
46        (C) TELEX: 706141 MRSNFOERS SFO
48 (2) INFORMATION FOR SEQ ID NO: 1:
50   (i) SEQUENCE CHARACTERISTICS:
51        (A) LENGTH: 822 base pairs
52        (B) TYPE: nucleic acid
53        (C) STRANDEDNESS: single
54        (D) TOPOLOGY: linear
56   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
58 GCATTCCTGT GAACCTGTGA CTTAGGACTA AACTTTGAGC AATAACACAC ATAGATTGAG      60
60 GATTGTTTGC TGTTAGCATA CAAACTCTGG TTCAAAGCTC CTCTTTATTG CTGTCTTGG      120
62 AAAATTGCT GTTCTTCATG GTTCTCTTT TCACTGCTAT CTATTTTCTT CAACCACTCA      180
64 CATGGCTACA ATAACGTCT GCAAGCTTAT GATTCCCAA TATCTATCTC TAGCCTCAAT      240

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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/509,591  
 DATE: 11/13/2000  
 TIME: 10:31:59

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\11132000\I509591.raw

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66 CTGTGTCAG AAGATAAAAA GTAGTATFCA AATGCACATC AACGTCTCCA CTGGAGGGC 300
68 TTAAAGACGT TTCAACATAC AAACCGGGA GTTTGCCCTG GAATGTTTCC TAAAAATGTGT 360
70 CCTGTAGCAC ATAGGGTCCCT CTGTTCCTTT AAAATCTAAT TACTTTTAGC CCAGTGCCTCA 420
72 TCCCACCTAT GGGGAGATGA GAGTGAAAAG GGAGCCTGAT TAATAATTAC ACTAAGTCAA 480
74 TAGGCATAGA GCCAGGACTG TTTGGGTAAA CTGGTCACCT TAICTTAAAC TAAATATATC 540
76 CAAAAC TGAA CATGTACTTA GTTACTAAGT CTTTGACTTT ATCTCATTTCA TACCACTCAG 600
78 CTTTATCCAG GCCACTTATG AGCTCTGTGT CCTTGAACAT AAAATACAAA TAACCGCTAT 660
80 GCTGTTAATT ATTGGCAAAAT GTCCCATTTT CAACCTAAGG AAATACCAAT AAGTAACAGA 720
82 TATACCAACA AAAGGTACTT AGTTAACAGG CATTGCCCTGA AAAGAGTATA AAAGAAATTT 780
84 AGCATGATTT TCCATATTTG GTTCCACCA CTGCCAATAA CA 822
86 (2) INFORMATION FOR SEQ ID NO: 2:
88 (i) SEQUENCE CHARACTERISTICS:
89 (A) LENGTH: 5224 base pairs
90 (B) TYPE: nucleic acid
91 (C) STRANDEDNESS: single
92 (D) TOPOLOGY: linear
94 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
96 GAATTCCTTAG AAATATGGGG GTAGGGGTGG TGGTGGTAAT TCTGTTTCA CCCCATAGGT 60
98 GAGATAAGCA TTGGGTAAAA TGTGCTTTCA CACACACATC ACATTTTCATA AGAATTAAGG 120
100 AACAGACTAT GGGCTGGAGG ACTTTGAGGA TGTCTGTCTC ATAACACTTG GGTGTATCT 180
102 GTTCATGAGG GCTGTGTTTA AGCTTGGCAA CTTGCAACAG GGTTCACCTGA CTTTCTCCCC 240
104 AAGCCCAAGG TACTGTCCTC TTTTCATATC TGTTTTGGGG CCTCTGGGGC TTGAATATCT 300
106 GAGAAAAATAT AAACATTTCA ATAATGTTCT GTGGTGAGAT GAGTATGAGA GATGTGTCAT 360
108 TCATTTGTAT CAATGAATGA ATGAGGACAA TTAGTGTATA AATCCTTAGT ACAACAATCT 420
110 GAGGGTAGGG GTGGTACTAT TCAATTTCTA TTTATAAAGA TACTTATTTT TATTTATTTA 480
112 TGCTGTGAC AAATGTTTTG TTTGGGACCA CAGGAATCAC AAAGATGAGT CTTTGAATTT 540
114 AAGAAGTTAA TGCTCCAGGA ATAATTACAT AGCTTACAAA TGACTATGAT ATACCATCAA 600
116 ACAAGAGGTT CCATGAGAAA ATAATCTGAA AGGTTTAATA AGTTGTCAA GGTGAGAGGG 660
118 CTCTTCTCTA GCTAGAGACT AATCAGAAAT ACATTCAGGG ATAATTTATTT GAATAGACCT 720
120 TAAGGGTTGG GTACATTTTG TTCAAGCATT GATGGAGAAG GAGAGTGAAT ATTTGAAAAC 780
122 ATTTTCAACT AACCAACCAC CCAATCCAAC AAACAAAAAA TGAAAAGAAT CTCAGAAACA 840
124 GTGAGATAAG AGAAGGAATT TTCTCACAAC CCACACGTAT AGCTCAACTG CTCTGAAGAA 900
126 GTATATATCT AATATTTAAC ACTAACATCA TGCTAATAAT GATAATAAAT ACTGTCAATT 960
128 TTTAATGTCT ATAAGTACCA GGCATTGAGA AGATATTTAT CCAATTTATAT ATCAAAATAA 1020
130 ACTTGAGGGG ATAGATCATT TTCTATGATAT ATGAGAAAAA TTA AAAACAG ATTGAATTAT 1080
132 TTGCCTGTCA TACAGCTAAT AATPGACCAT AAGACAAATTA GATTTAAATTT AGTTTGAAT 1140
134 CTTTCTAATA CCAAAGTTCA GTTTACTGTT CCATGTTGCT TCTGAGTGGC TTCACAGACT 1200
136 TATGAAAAAG TAAACGGAAT CAGAATTACA TCAATGCCAA AGCATTGCTG TGAACCTCTG 1260
138 ACTTAGGACT AAACCTTGAG CAATAACACA CATAGATTGA GGATGTTTGG CTGTTAGCAT 1320
140 ACAAACCTCT GTTCAAAGCT CTTCTTTATTT GCTTGTCTTG GAAAAATTTG TGTTCCTCAT 1380
142 GGTTCCTCTT TTTACTGCTA TCTATTTTTC TCAACCACTC ACATGGCTAC AATAACTGTC 1440
144 TGCAAGCTTA TGATTCCCAA ATATCTATCT CTAGCCTCAA TCTTGTTCCT GAAGATAAAA 1500
146 AGTAGTATTC AAATGCACAT CAACGTCTCC ACTTGGAGGG CTAAAGACG TTTCAACATA 1560
148 CAAACCGGGG AGTTTTCCTT GGAATGTTTC CTAAATGTG TCCTGTAGCA CATAGGGTCC 1620
150 TCTTGTTCCT TAAATCTTAA TTACTTTTAG CCCAGTGCTC ATCCCACCTA TGGGGAGATG 1680
152 AGAGTGAAAA GGGAGCCTGA TTAATAATTA CACTAAGTCA ATAGGCATAG AGCCAGGACT 1740
154 GTTTGGGTAA ACTGGTCACT TTATCTTAAA CTAAATATAT CCAAACTGA ACATGTACTT 1800
156 AGTTACTAAG TCTTTGACTT TATCTCATTC ATACCACCTA GCTTTATCCA GGCCACTTAT 1860
158 TTGACAGTAT TATTGCGAAA ACTTCCTAAC TGGTCTCCTT ATCATAGTCT TATCCCTTT 1920

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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/509,591  
 DATE: 11/13/2000  
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Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\11132000\I509591.raw

160	TGAAACAAAA	GAGACAGTTT	CAAAATACAA	ATATGATTTT	TATTAGCTCC	CTTTTGTGT	1980
162	CTATAAGT	CCCAGAAGGA	GTTATAAACT	CCATTTAAAA	AGTCTTTGAG	ATGTGGCCCT	2040
164	TGCCAACTTT	GCCAGGAAT	CCCAATATCT	AGTATTTTCT	ACTATTA AAC	TTTGTGCCCT	2100
166	TTCAAAACTG	CATTTCTCT	CATTCCCTAA	GTGTGCATTG	TTTTCCTTA	CCGGTTGGT	2160
168	TTTCCACCAC	CTTTTACATT	TTCTGTGAAC	ACTATACCCT	CCCTCTTCAT	TTGGCCCAAC	2220
170	TCFAATTTTC	TTTCAGATCT	CCATGAAGAT	GTTACTTCTT	CCAGGAAGCC	TTATCTGACC	2280
172	CCTCCAAAGA	TGTCATGAGT	TCCTCTTTTC	ATTCTACTAA	TCACAGCATC	CATCACACCA	2340
174	TGTTGTGATT	ACTGATACTA	TTGTCTGTTT	CTCTGATPAG	GCAGTAAGCT	CAACAAGAGC	2400
176	TACATGGTGC	CTGTCTCTTG	TTTGTCTGATTA	TTCCCATCCA	AAAACAGTGC	CTGGGAATGCA	2460
178	GACTTAACAT	TTTATTTGAA	GAATAAATAA	AACCCCATCT	ATCGAGTGTCT	ACTTTGTGCA	2520
180	AGACCCGGTT	CTGAGGCATT	TATATTTATTT	GATTTATTTA	ATTCTCATTT	AACCATGAAG	2580
182	GAGGTACTAT	CACTATCTTT	ATTTTATAGT	TGATAAAGAT	AAAGCCCAGA	GAAATGAATT	2640
184	AACTCACCCA	AAGTCATCTA	GCTAAGTGAC	AGGGCAAAAA	TTCAAACCAAG	TTCCCCAACT	2700
186	TTACGTGATT	AATAGTGTGC	TATACGCCCT	CTCTGATCAT	ATGGCATGGA	ATGCAGACAT	2760
188	CTGCTCCGTA	AGGCAGAAATA	TGGAAGGAGA	TTGGAGGATG	ACACAAAACC	AGCATAATAT	2820
190	CAGAGGAAAA	GTCCAAACAG	GACCTGAAC	GATAGAAAAAG	TTGTFACTCC	TGGTGAGTC	2880
192	GCATCGACAT	CTTGATGAAC	TGGTGGCTGA	CACAACATAC	ATTGGCTTGA	TGTGTACATA	2940
194	TTATTTGTAG	TTGGTGTGT	ATTTTATAT	ATATATTTGT	AATATGAAA	TAGTCATAAT	3000
196	TTACTAAAGG	CCTACCATTT	GCCAGGCATT	TTTACATTTG	TCCCTCTAA	TCTTTTGTATG	3060
198	AGATGATCAG	ATTGGATTAC	TTGGCCTTGA	AGATGATATA	TCTACATCTA	TATCTATATC	3120
200	TATATCTATA	TCTATATCTA	TATCTATATC	TATATCTATA	TATGTATATC	AGAAAAGCTG	3180
202	AAATATGTTT	TGTAAGTTTA	TAAAGATTTC	AGACTTTATA	GAATCTGGGA	TTTGCCAAAT	3240
204	GTAAACCCCT	TCTCTACATT	AAACCCATGT	TGGAACAAAT	ACATTTATTA	TTCATTCATC	3300
206	AAATGTTGCT	GAGTCTTGGC	TATGAACCAG	ACACTGTGAA	AGCCTTTGGG	ATATTTTGGC	3360
208	CATGCTTGGG	CAAGCTTATA	TAGTTTGTCT	CATAAACTC	TATTTTCACT	CTTCACTAAT	3420
210	AATACTTCAT	GACTATTTGT	TTTCAGGTAT	TTCTTCATAA	CAAATACTTT	GGCTTTCATA	3480
212	TATTTGAGTA	AAGTCCCCCT	TGAGGAAGAG	TAGAAGAACT	GCATTTGTA	AATACATATC	3540
214	TGGAATCCAA	ACGGATAGAC	AAGGATGGTG	CTACCTCTTT	CTGGAGAGTA	CGTGAGCAAG	3600
216	GCCGTGTTTG	TTAACATGTT	CCTTAGGAGA	CAAAACTTAG	GAGAGACACG	CATAGCAGAA	3660
218	AATGGACAAA	AACTAACAAA	TGAATGGGAA	TTGTACTTGA	TTAGCATTGA	AGACCTTGT	3720
220	TATACTATGA	TAAATGTTTG	TATTTGCTGG	AAGTGCTACT	GACGGTAAAC	CCTTTTGTGT	3780
222	TAAATGTGTG	CCCTAGTAGC	TTGCAGTATG	ATCTATTTT	TAAGTACTGT	ACTTAGCTTA	3840
224	TTTAAAAAAT	TTATGTTTAA	AATTGCATAG	TGCTCTTTCA	TTGAAGAAGT	TTTGAGAGAG	3900
226	AGATAGAATT	AAATTCACCT	ATCTTACCAT	CTAGAGAAAC	CCAATGTTAA	AACTTTGTGT	3960
228	TCCATTATTT	CTGTCTTTTA	TTCAACATTT	TTTTAGAGG	GTGGGAGGAA	TACAGAGGAG	4020
230	GTACAATGAT	ACACAAATGA	GAGCACTCTC	CATGTATTTG	TTTGTCTCTG	TTTTCAGTTA	4080
232	ACAATATATT	ATGAGCATAT	TTCCATTTCA	TTAAATATTC	TTCCACAAAG	TTATTTTGAT	4140
234	GGCTGTATAT	CACCTACTTT	TATGAATGTA	CCATATTAAT	TTATTTCTTG	GTGTGGGTTA	4200
236	TTTGATTTTA	TAATCTTACC	TTTAGAATAA	TGAAACACCT	GTGAAGCTTT	AGAAAATACT	4260
238	GGTGCCTGGG	TCTCAACTCC	ACAGATTCTG	ATTAACTGG	TCTGGGTTAC	AGACTAGGCA	4320
240	TTGGGAATTC	AAAAAGTTCC	CCCAGTGATT	CTAATGTGTA	GCCAAGATCG	GGAACCCCTG	4380
242	TAGACAGGGA	TGATAGGAGG	TGAGCCACTC	TTAGCATCCA	TCATTTAGTA	TTAACATCAT	4440
244	CATCTTGAGT	TGCTAAGTGA	ATGATGCACC	TGACCCACTT	TATAAAGACA	CATGTGCAAA	4500
246	TAAAATTATT	ATAGGACTTG	GTTTATTAGG	GCTTGTGCTC	TAAGTTTCT	ATGTTAAGCC	4560
248	ATACATCGCA	TACTAAATAC	TTTAAATGT	ACCTTATTTGA	CATACATATT	AAGTGAAGAG	4620
250	TGTTTCTGAG	CTAAACAATG	ACAGCATAAT	TATCAAGCAA	TGATAAATTG	AAATGAATTT	4680
252	ATTTATTTCTG	AACCTAGGGA	CAAGTCATCT	CTCTGAATTT	TTTGTACTTT	GAGAGTATTT	4740
254	GTTATATTTG	CAAGATGAAG	AGTCTGAATT	GGTCAGACAA	TGTCCTGTGT	GCCTGGCATA	4800
256	TGATAGGCAT	TAAATAGTTT	TAAAGAATTA	ATGTATTTAG	ATGAATTGCA	TACCAAACTC	4860

RAW SEQUENCE LISTING                      DATE: 11/13/2000  
 PATENT APPLICATION: US/09/509,591        TIME: 10:31:59

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\11132000\I509591.raw

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258 GCTGTCTTTT CTTTATGGCT TCATTAACCTT AATTTCAGAG AAATTAATTA TTCTGCAACT 4920
260 TAGGGACAAG TCATGTCTTT GAATATTCTG TAGTTTCAGG AGAATATTG TTATATTGTC 4980
262 AAAATAAAAT AAGTTTGCAA GTTTTCTTTT TCTGCCCCAA AGAGCTCTGT GTCCTTGAAC 5040
264 ATAAATACA AATAACCGCT ATGCTGTAA TTATFGCAA ATGTCCCAT TCAACCTAA 5100
266 GGAAATACCA TAAAGTAACA GATATACCAA CAAAAGGTTA CTAGTTAACA GGCATTGCCT 5160
268 GAAAAGACTA TAAAAGAAAT TCAGCAATGAT TTCCATAAT GTGCTTCCAC CACTGCCAAT 5220
270 AACA 5224

272 (2) INFORMATION FOR SEQ ID NO: 3:
274 (i) SEQUENCE CHARACTERISTICS:
275 (A) LENGTH: 19 base pairs
276 (B) TYPE: nucleic acid
277 (C) STRANDEDNESS: single
278 (D) TOPOLOGY: linear
280 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
282 TCGTCTTCAA GAATTCCTCA 19

284 (2) INFORMATION FOR SEQ ID NO: 4:
286 (i) SEQUENCE CHARACTERISTICS:
287 (A) LENGTH: 20 base pairs
288 (B) TYPE: nucleic acid
289 (C) STRANDEDNESS: single
290 (D) TOPOLOGY: linear
292 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
294 TTTCAGTCAC CGGTGTCGGA 20

299 (2) INFORMATION FOR SEQ ID NO: 5:
301 (i) SEQUENCE CHARACTERISTICS:
302 (A) LENGTH: 20 base pairs
303 (B) TYPE: nucleic acid
304 (C) STRANDEDNESS: single
305 (D) TOPOLOGY: linear
307 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
309 GCATTCTCTA GACACAGGTG 20

311 (2) INFORMATION FOR SEQ ID NO: 6:
313 (i) SEQUENCE CHARACTERISTICS:
314 (A) LENGTH: 20 base pairs
315 (B) TYPE: nucleic acid
316 (C) STRANDEDNESS: single
317 (D) TOPOLOGY: linear
319 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
321 TCCGACACCG GTGACTGAAA 20

323 (2) INFORMATION FOR SEQ ID NO: 7:
325 (i) SEQUENCE CHARACTERISTICS:
326 (A) LENGTH: 21 base pairs
327 (B) TYPE: nucleic acid
328 (C) STRANDEDNESS: single
329 (D) TOPOLOGY: linear
331 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
333 GCCCAGGCC GCATTATATA C 21

335 (2) INFORMATION FOR SEQ ID NO: 8:
337 (i) SEQUENCE CHARACTERISTICS:

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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/509,591  
 DATE: 11/13/2000  
 TIME: 10:31:59

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\11132000\I509591.raw

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338      (A) LENGTH: 21 base pairs
339      (B) TYPE: nucleic acid
340      (C) STRANDEDNESS: single
341      (D) TOPOLOGY: linear
343      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
345 GTATATAATG CGCCCGTGGG C                21
348 (2) INFORMATION FOR SEQ ID NO: 9:
350      (i) SEQUENCE CHARACTERISTICS:
351          (A) LENGTH: 21 base pairs
352          (B) TYPE: nucleic acid
353          (C) STRANDEDNESS: single
354          (D) TOPOLOGY: linear
356      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
358 CCAGAAAATC CAGCAGGTAC C                21
360 (2) INFORMATION FOR SEQ ID NO: 10:
362      (i) SEQUENCE CHARACTERISTICS:
363          (A) LENGTH: 29 base pairs
364          (B) TYPE: nucleic acid
365          (C) STRANDEDNESS: single
366          (D) TOPOLOGY: linear
368      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
370 GTGACCGGTG CATGCTGTG AACTCTGTA        29
372 (2) INFORMATION FOR SEQ ID NO: 11:
374      (i) SEQUENCE CHARACTERISTICS:
375          (A) LENGTH: 27 base pairs
376          (B) TYPE: nucleic acid
377          (C) STRANDEDNESS: single
378          (D) TOPOLOGY: linear
380      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
382 ATAAGTGGCC TGGATAAAGC TGAGTGG        27
384 (2) INFORMATION FOR SEQ ID NO: 12:
386      (i) SEQUENCE CHARACTERISTICS:
387          (A) LENGTH: 28 base pairs
388          (B) TYPE: nucleic acid
389          (C) STRANDEDNESS: single
390          (D) TOPOLOGY: linear
392      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
394 GTCACCGGTC TTTGTTATTG GCAGTGGT        28
397 (2) INFORMATION FOR SEQ ID NO: 13:
399      (i) SEQUENCE CHARACTERISTICS:
400          (A) LENGTH: 30 base pairs
401          (B) TYPE: nucleic acid
402          (C) STRANDEDNESS: single
403          (D) TOPOLOGY: linear
405      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
407 ATCCAGGCCA CTTATGAGCT CTGTGTCCTT        30
409 (2) INFORMATION FOR SEQ ID NO: 14:
411      (i) SEQUENCE CHARACTERISTICS:
412          (A) LENGTH: 26 base pairs

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VERIFICATION SUMMARY                      DATE: 11/13/2000  
PATENT APPLICATION: US/09/509,591        TIME: 10:32:00

Input Set : A:\Pto.amc  
Output Set: N:\CRF3\11132000\I509591.raw

L:30 N:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

1632

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,591

DATE: 11/06/2000  
TIME: 12:25:12

Input Set : A:\#523643 v1 - 34802-20004.20 App. 09509591.txt  
Output Set: N:\CRF3\11062000\I509591.raw

**Does Not Comply  
Corrected Diskette Needed**

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:  
5 (i) APPLICANT: Little, Andrew  
6 Lamparski, Henry  
7 Schuur, Eric  
8 Henderson, Daniel  
10 (ii) TITLE OF INVENTION: ADENOVIRUS VECTORS SPECIFIC FOR CELLS  
11 EXPRESSING ALPHA-FETOPROTEIN AND METHODS OF USE THEREOF  
13 (iii) NUMBER OF SEQUENCES: 23  
15 (iv) CORRESPONDENCE ADDRESS:  
16 (A) ADDRESSEE: MORRISON & FOERSTER  
17 (B) STREET: 755 PAGE MILL ROAD  
18 (C) CITY: PALO ALTO  
19 (D) STATE: CA  
20 (E) COUNTRY: USA  
21 (F) ZIP: 94304-1018  
23 (v) COMPUTER READABLE FORM:  
24 (A) MEDIUM TYPE: Floppy disk  
25 (B) COMPUTER: IBM PC compatible  
26 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
27 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30  
29 (vi) CURRENT APPLICATION DATA:  
C--> 30 (A) APPLICATION NUMBER: US/09/509,591  
C--> 31 (B) FILING DATE: 02-Jun-2000  
32 (C) CLASSIFICATION:  
34 (vii) PRIOR APPLICATION DATA:  
35 (A) APPLICATION NUMBER: PCT/US98/04084  
36 (B) FILING DATE: 03-MAR-1998  
38 (viii) ATTORNEY/AGENT INFORMATION:  
39 (A) NAME: POLIZZI, CATHERINE M.  
40 (B) REGISTRATION NUMBER: 40,130  
41 (C) REFERENCE/DOCKET NUMBER: 348022000420  
43 (ix) TELECOMMUNICATION INFORMATION:  
44 (A) TELEPHONE: (650) 813-5600  
45 (B) TELEFAX: (650) 494-0792  
46 (C) TELEX: 706141 MRSNFOERS SFO

ERRORED SEQUENCES

549 (2) INFORMATION FOR SEQ ID NO: 23:  
551 (i) SEQUENCE CHARACTERISTICS:  
552 (A) LENGTH: 101 amino acids  
553 (B) TYPE: amino acid  
554 (D) TOPOLOGY: linear  
556 (ii) MOLECULE TYPE: protein  
558 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:



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PATENT APPLICATION: US/09/509,591

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Input Set : A:\#523643 v1 - 34802-20004.20 App. 09509591.txt

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560 Met Thr Gly Ser Thr Ile Ala Pro Thr Thr Asp Tyr Arg Asn Thr Thr
561 1 5 10 15
563 Ala Thr Gly Leu Thr Ser Ala Leu Asn Leu Pro Gln Val His Ala Phe
564 20 25 30
566 Val Asn Asp Trp Ala Ser Leu Asp Met Trp Trp Phe Ser Ile Ala Leu
567 35 40 45
569 Met Phe Val Cys Leu Ile Ile Met Trp Leu Ile Cys Cys Leu Lys Arg
570 50 55 60
572 Arg Arg Ala Arg Pro Pro Ile Tyr Arg Pro Ile Ile Val Leu Asn Pro
573 65 70 75 80
575 His Asn Glu Lys Ile His Arg Leu Asp Gly Leu Lys Pro Cys Ser Leu
576 85 90 95
578 Leu Leu Gln Tyr Asp
579 100

```

```

E--> 585 1
E--> 588 1
E--> 589 |||

```

## VERIFICATION SUMMARY

DATE: 11/06/2000

PATENT APPLICATION: US/09/509,591

TIME: 12:25:13

Input Set : A:\#523643 v1 - 34802-20004.20 App. 09509591.txt

Output Set: N:\CRF3\11062000\I509591.raw

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:585 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:23  
M:332 Repeated in SeqNo=23  
L:589 M:330 E: (2) Invalid Amino Acid Designator, 1  
L:589 M:203 E: No. of Seq. differs, LENGTH:input:101 Found:102 SEQ:23